REMARKS

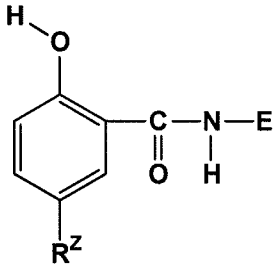
By the present amendment, Applicants amend claims 17, 24, 25, and 28; cancel claims 31-33; and add claims 34-36. The specification fully supports these amendments, which do not add prohibited new matter. The Office will find support for these amendments throughout the specification, e.g., at page 2, second full paragraph; page 14, second full paragraph; page 105, second full paragraph; and page 106, Test Example 1.

Claim Rejections – 35 U.S.C. § 112, First Paragraph

The Office Action rejects claims 17, 21, 24-30, and 31-33 under 35 U.S.C. § 112, first paragraph, as allegedly lacking enabling support in the specification. The Office continues to rely on Brown et al., *Lancet Oncology*, 2004, 5, 497-508 for its disclosure that photodynamic therapy of melanoma comprising administration of aminolevulnic acid has not been pursued partly because of the aggressive nature of the disease. The Office Action asserts that such disclosure "suggests that this treatment option, which is effective against other forms of skin cancer, is ineffective against *melanoma* in part because of melanoma's high rate of matastasis." (Office Action at page 3, second full paragraph; emphasis added). The Action also asserts that Formula (1) constitutes a broad genus of compounds, and that Applicants have not established a structure-function relationship between the compounds encompassed by Formula (1) and the treatment and/or prevention of dermal pigmentation and/or skin cancer. The Action also asserts that "prevention" has been given it's broadest reasonable definition: " 'to keep from happening or existing', i.e. to completely eradicate" (Office Action at page 4, first full paragraph).

In response, Applicants respectfully submit that the instant amendment is responsive to the rejection of the claims under 35 U.S.C. § 112, first paragraph. Applicants further submit that the specification describes compounds such as Compound 50, and further describes that Compound 50 suppresses transformation and proliferation of *melanocytes* (e.g., page 106, Test Example 1). In contrast, the Office appears to assert that the claimed compounds act directly upon -- and thereby suppress proliferation of -- *melanoma cells*.

In addition, Applicants submit that claim 17 has been amended to recite "[a] method for preventing the development of dermal pigmentation and/or skin cancer caused by transformation and/or proliferation of melanocytes in a mammal including a human, which comprises administering to the mammal a preventively effective amount of an inhibitor of transformation and/or proliferation of melanocytes, wherein said inhibitor is a compound represented by the following general formula (I) or a pharmacologically acceptable salt thereof:



(I)

wherein E represents a 2,5-bis(trifluoromethyl)phenyl group or a 3,5-bis(trifluoromethyl)phenyl group, and

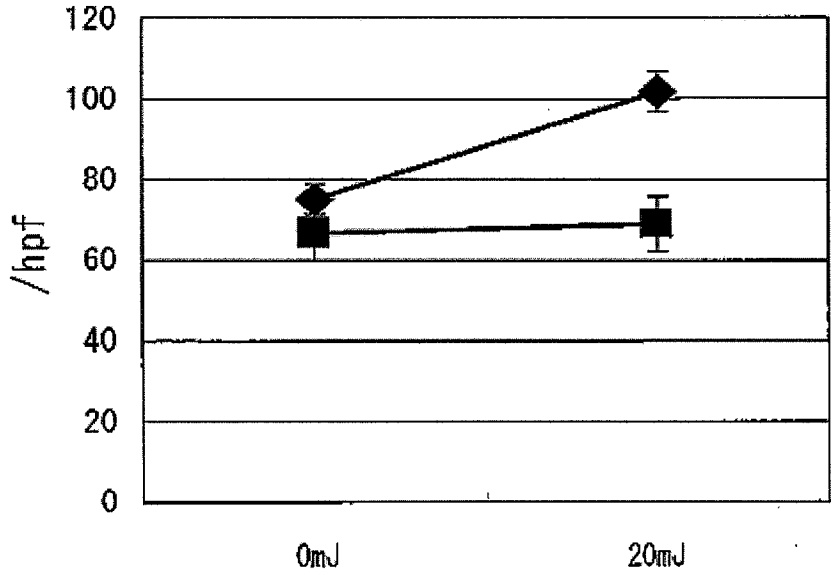
wherein R^z represents a halogen atom.

In particular, Applicants submit that claim 17 now recites "skin cancer caused by transformation and/or proliferation of melanocytes."

Applicants also note that the rejection is at least partly based upon the Office's interpretation of the word "prevention," which the Office maintains as meaning "'to keep from happening or existing,' i.e., to completely eradicate" (Office Action at page 4, first full paragraph). Applicants respectfully maintain that this definition is overly limiting, and inconsistent with the art. Applicants submit that something can be kept from happening or existing at a level of less than complete – and indeed, can be prevented from occurring at an infinite number of levels.

In addition, Applicants submit that the following experimental results as well as the results disclosed in Example 1 of the specification, further support the ability of the claimed invention to prevent the development of dermal pigmentation and/or skin cancer caused by transformation and/or proliferation of melanocytes in a mammal including a human. The experiment, carried out according to the method of Example 1 described in the specification, demonstrates almost complete inhibition by Compound 50 against the proliferation of melanocytes. As described in the specification, an inhibitor with safety against cellular

transformation and/or proliferation of malanocytes upon ultraviolet irradiation is expected to have a preventative effect on skin cancer development (specification at page 2, first full paragraph).



The above graph shows results with or without irradiation by ultraviolet light (20 mJ) in the presence of Compound 50 (■). The graph also indicates results with and without irradiation by ultraviolet light (20 mJ) in the absence of Compound 50 (♦). From the above experimental results, as well as from the results of Example 1 of the specification, it can be understood that administration of Compound 50 before irradiation by ultraviolet light successfully prevents induction of transformation and proliferation of melanocytes, thereby preventing skin cancer caused by transformation and/or proliferation of melanoytes.

Based at least on the foregoing, Applicants respectfully submit that the claims fully satisfy the requirements of 35 U.S.C. § 112, first paragraph, and respectfully request withdrawal of the rejection.

Claim Rejections – 35 U.S.C. § 102

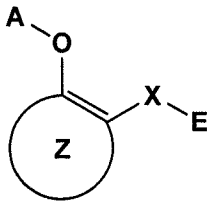
The Office Action rejects claims 17, 21, 24-30, and 31-33 under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 3,332,996, to Zerweck et al. ("the '996 patent"). In particular, the Office Action asserts that the '996 patent discloses a concentration of 10 micrograms per milliliter, and asserts that such disclosure is consistent with Applicants' disclosure of therapeutically effective amounts of the compound.

In response, and without acquiescing to the propriety of the rejection, Applicants submit that the instant amendment is responsive to the rejection of the claims under 35 U.S.C. § 102(b). Applicants further submit that the '996 patent fails to teach and/or fairly suggest that Compound 50 has inhibitory action against the transformation or proliferation of melanocytes. Furthermore, Applicants submit while the '996 patent discloses that Compound 50 has excellent antibacterial activities against *S. aureus* or *E. coli* (see, e.g., column 3, lines 10-56), the disclosure of the '996 patent would appear to be limited to applications of Compound 50 for purposes such as disinfection and or the elimination of bacterial contamination/infection. Any description of Compound 50 application to the skin disclosed in the '996 patent is therefore carried out without any expectation of pharmacological action by Compound 50 on melanocytes. For at least the above reasons, Applicants submit that the '996 patent discloses administration to skin in a manner that would not anticipate the present invention.

Accordingly, Applicants respectfully submit that the '996 patent fails to disclose Applicants' claimed invention, and respectfully request withdrawal of the rejection under 35 U.S.C. § 102(b).

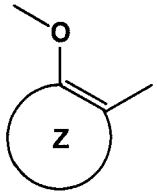
Claim Rejections – 35 U.S.C. § 112, Second Paragraph

The Office Action rejects claims 17, 21, and 24-33 under 35 U.S.C. § 112, second paragraph, as allegedly indefinite for recitation of "a compound represented by the following general formula (I) or a pharmacologically acceptable salt thereof:



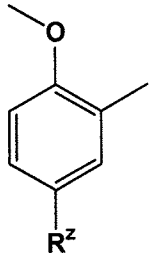
(I)

... the following partial formula (Iz-1) in the general formula (I) containing ring Z



(Iz-1)

represents the following formula (Iz-2):



(Iz-2)

wherein R^z represents a halogen atom."

In response, and without acquiescing the propriety of the rejection, Applicants submit that the claims are now even clearer and more definite, and that the instant Amendment is responsive the rejection of the claims under 35 U.S.C. § 112, second paragraph.

Accordingly, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. § 112, second paragraph.

CONCLUSION

If there are any comments or questions, the undersigned may be contacted at the below-listed telephone number.

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